**DOCUMENT RESUME**

**ED 169 399** **CG 013 298**

AUTHOR Davenport, Robert L.; Cotler, Sheldon
TITLE Evaluation of a Neighborhood Settlement House After-School Program.
PUB DATE Aug 78
NOTE 17p.; Paper presented at the Annual Convention of the American Psychological Association (86th, Toronto, Ontario, Canada, August, 1978)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Academic Achievement; *After School Programs; Developmental Stages; Elementary Education; Elementary School Students; Individual Differences; *Interpersonal Competence; *Parent Child Relationship; Program Evaluation; *Self Esteem; Student Development

ABSTRACT

An urban, federally funded after-school program for children ages 6-13 was evaluated. Program children were compared to control children with respect to social skills, self-esteem, school achievement, and congruence between parent and child ratings. Multivariate statistical analyses indicated that program children surpassed controls in all but the social skills area. Length of time in the program as significantly related to increases in self-esteem and congruence of parent-child ratings. Control parents gave significantly more favorable ratings on the dependent variables than the program parents. Ratings of control parents were also significantly less congruent with their children's self-ratings than were ratings of program parents. (Author)

**********
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
**********

ED169399

# Evaluation of a Neighborhood Settlement House After-School Program

Robert L. Davenport and Sheldon Cotler

De Paul University

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

R L Davenport

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND USERS OF THE ERIC SYSTEM."

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

This paper was presented at the 86th Annual Convention of the American Psychological Association, Toronto, Canada, August, 1978

Running Head: After-School Program

CG013298

# Evaluation of a Neighborhood Settlement House After-School Program

Studies such as the Report of the Joint Commission on Mental Health of Children (Note 1) strongly recommend that more preventive mental health programs for children need to be developed and funded. Currently, hundreds of millions of dollars are spent on enrichment programs designed to promote children's intellectual, physical, and emotional development. However, as Ellsworth (1975) points out, evaluation must play a key role in the evolution of such programs because funding will be based on the ability to document the effectiveness of preventive services. Evaluation plays an equally improtant role in providing internal feedback to service providers. The effects of programming need to be established so that enlightened decisions, based on facts, can be made about continued program development (Campbell, 1969). Without objective data regarding efficacy, well-intentioned professionals may make decisions which may not serve the best interests of their constituency.

The earliest reported systematic evaluations of prevention programs designed to enhance children's social-emotional and cognitive growth were performed on the federally funded Head Start programs. Several investigators (e.g., Zigler and Butterfield, 1968; Abelson, Zigler, & Levine, [Note 2]; Beller [Note 3]) reported data demonstrating the effectiveness of these enrichment programs for pre-school children. While there has been limited research with older children, it has been suggested that extensive programming for school-age children is desirable (Klaus and Gray, 1970; Beller, Note 2). In recent years school-age children have been the focus of more attention (Durlak, 1977), and there is general agreement that evaluation

to assess program effects is essential (Cowen, Trost, Dorr, Lorion, Izzo, & Isaacson, 1975). However, there are serious problems with the extent, accuracy, and methodological sophistication of these program evaluations (Cottrell, 1967; Wholey, Scanlon, Duffy, Fukumoto, & Vogt, Note 4).

Studies of pre-school programs have yielded several important principles which should be considered when evaluating enrichment programs for older children. Zigler and Butterfield (1968) and Abelson et al. (Note 2) point out the necessity of separating social-emotional factors from cognitive-achievement factors when assessing program effects on children. Karnes, Zehrback, and Teska (Note 5) identify the need to have clearly defined program goals before evaluating benefits to children. Beller's (Note 2) study emphasizes the value of employing multiple measures to assess the differential effects that a program has on children's social-emotional and cognitive functioning.

The present study involved the assessment of an enrichment program on the cogritive and social-emotional development of school-age children, 6 to 13 years old. Consistent with the evaluation principles suggested above and those described by Campbell and Fiske (1959) and Fiske (1963), multitrait-multimethod procedures were used to assess the program's effects on the children. In addition, efforts were made to employ evaluation procedures which would also be useful to the program's staff in terms of their own planning and development.

The evaluation study had several objectives: There was the obvious commitment to respond to the program's request for evaluative services. Professionals must be able to provide a high quality product without disrupting the ongoing program operations. Secondly, the study provided an opportunity to develop a general approach toward evaluation that could

be applied to other service delivery systems. Finally, the evaluation process was intended to satisfy scientific curiosity about program efficacy and test analytical skills by offering suggestions for improvement.

## Method

### Setting

The After-School Program (ASP) is a federally funded Model Cities Program housed in a multi-service neighborhood settlement house in Chicago, Illinois. The ASP served elementary school-aged children from families with income below the standard poverty level and who were either working or in job training. Most of the parents were white, lower-middle-class and unskilled.

In its funding proposal, the ASP identified itself as a preventive enrichment program which supplemented formal school education and provided social, intellectual, physical, and emotional growth experiences for children with working parents. Children attended from 2:00 to 6:00 PM on school-days and from 8:30 AM to 6:00 PM on holidays and summer vacations. All children lived within a mile radius of the settlement house and generally walked to and from the program.

The five full-time staff members with the ASP were all college educated, but only the director (a social worker) was formally trained to work with children. Staff received in-service training, but skills were primarily acquired through on-the-job experience. Each of three staff members was assigned to one specific group of children. The other two staff were responsible for designing programs and curriculum and helping out with special projects or needy children.

The ASP was physically housed in the basement of the settlement house. There was office space for the staff, a curriculum library, two group rooms, an arts and crafts room and a large community meeting room. In addition, the children had access to a gymnasium and an outdoor playground. The typical routine required children to first assemble in the community room for announcements and snacks. Then they would be divided into smaller groups for social activities, physical recreation, arts and crafts, tutoring, homework sessions, etc. In addition, there were many outside acitvities consisting of educational field trips to museums, plays, musical performances, and movies.

Subjects

All 41 children enrolled in the ASP program were included in the experimental study. The 21 control children consisted of 11 children on the ASP waiting list and 10 children who met eligibility requirements, but who were participating in a nearby park district program. The ASP routinely assigned children to groups by age and assigned a staff member to each group. There were 12 children in the 6 to 7 year old group, 14 children in the 8 to 9 year old group, and 15 children in the 10 to 13 year old group. Of the 21 control children there were 9, 4, and 8 children in each of the respective age groups.

Length of time in the program was expected to be a factor significantly affecting the children's progress. Children were in the ASP for a range of 3-15 months at the time of the study. For purposes of data analysis, control children were characterized as being in the program for zero months.

Entry

The authors were serving as program and case consultants to a different

settlement house unit when they were asked by the ASP director to discuss her program. The funding agency demanded that the ASP evaluate its services, but provided no guidelines about how to achieve this objective. A series of meetings was instituted to: 1) Get acquainted with the staff; 2) participate in some of the actual activities with the children; 3) help the staff to define their program objectives and the relationship between their day to day activities and their objectives; 4) include the staff in the development and implementation of the evaluation system; and 5) prepare the staff for feedback.

Instruments

An examination of the ASP funding proposal, in addition to staff discussions, resulted in the identification of four primary areas of investigation: social skills, self-esteem, school achievement, and parent-child communication. Given our multitrait-multimethod orientation (Campbell & Fiske, 1959) we derived our data from three separate sources: the child, his or her parents, and school records.

Assessment instruments were selected after the preceding areas of interest were identified. Selection was based on applicability to the child sample and feasibility and economy of use.

Social skills were assessed by administering the primary or elementary forms of the California Test of Personality (CTP, Note 6), depending on the age of the child. In addition, 5-point rating scales were devised for each of the 7 areas covered on the CTP (e.g., self-reliance and withdrawal tendencies). The children evaluated themselves by rating "all of the time", "most of the time" in a positive direction; "sometimes", which was considered neutral; and "most of the time" and "all of the time" in a negative direction.

For example, "all of the time" or "most of the time" would be attached to either "...I feel good about myself" or "... I feel bad about myself", with the fifth neutral choice reading "Sometimes I feel good about myself, but sometimes I feel bad about myself". Parents also rated their children's social skills by responding to the 5-point scales. The final measure of social skills was a "conduct grade" (A through F, scored 1 to 5), which was routinely recorded on the children's report cards by their teachers.

Children's self-esteem was measured by the 25 item short-form of the Coopersmith (1959) Self-Esteem Inventory (SEI). Additional measures consisted of the self-esteem subtest of the CTP; and a 5-point rating scale for self-esteem, identical in form to that used for social skills. Children also played the Bean Bag Toss, a behavioral test of self-esteem similar to the task used by Coopersmith (1967). The Bean Bag Toss consists of ten rectangular targets (numbered 1-10) placed at increasing distances from the child subjects. Each child was asked to identify his target (goal) before each of 10 bean bag tosses. The total score was determined by adding all target successes -- e.g., the child would receive 7 points if he selected target #7 and successfully tossed the bean bag into it. Parents rated their children's self-esteem by responding to the parallel 25 item parent form of the SEI and the 5-point rating scale for self-esteem.

There were multiple measures of school achievement. Both children and parents responded to two 5-point rating scales regarding grades and effort in school. The raters had to rate the quality of grades from "good all of the time" to "bad all of the time" and the amount of effort from " I do as well as I can all of the time" to "I never do as well as I can". Teachers provided measures of school achievement by their assignment of grades in Reading and Math on the children's report cards. School

records were used to gather data about attendance, tardiness, and the results of the standardized Iowa Test of Basic Skills (Note 7).

Finally, parent-child communication was assessed by examining the congruence between parent and child ratings with respect to social skills, self-esteem, and school achievement. Calculations consisted of parent ratings minus child ratings. Positive scores indicated that a parent's ratings were more favorable than those of his or her child. Negative scores indicated that the parent had a less favorable view of the child than did the child himself.

Procedure

After written parent permission was obtained, the paper and pencil tests were administered to small groups of children (N = 5 to 7) during two testing periods in one afternoon. Testing was supervised by program personnel and psychology graduate students. The Bean Bag behavioral test was conducted after the completion of the paper and pencil tests. Small groups of control children were tested separately, but the format and location (the settlement house) were identical. The rating forms were distributed to the program parents at one of their regular monthly meetings. Control parents were assembled at the settlement house to complete their forms. In five cases (out of 62), parents were unable to attend group meetings and consequently they were visited by an experimenter and an ASP person at their home to complete the materials. When both parents were present, they were asked to collaborate and fill out only one form. School data were collected from the children's report cards and official school records.

## Results

The multimeasure data were analyzed by two multivariate statistics.

Hoteling's $T^2$, as described by Morrison (1976), was employed to assess overall differences between program and control children in each of four areas -- children's social skills, self-esteem, school achievement, and parent-child communications. Analyses were performed for each data source where applicable — child, parent, and school. Canonical correlation procedures, as described by Nie, Hull, Jenkins, Steinbrenner and Bent (1975), were employed to assess relationships between length of program attendance and children's functioning in each of the program areas. Data were analyzed by canonical procedures for each of the three data sources.

With regard to social skills, no significant differences were found in either the children's reports on the CTP and Rating Scales, $T^2$ (14,47) = 16.02, $p < .57$, or the conduct grades reported by the teacher, $F$ (1,46) = 1.77, $p < .19$. (F tests were used in instances where only one measure was available.) Differences were significant between program and control parents' rating scale reports of their children's social skills. Unexpectedly, control parents rated their children higher on social skills than program parents rated their children, $T^2$ (7,50) = 23.92, $p < .01$.

Differences between program and control children's self-esteem, as collectively measured by the SEI, self-ratings, and the Bean Bag Toss, indicated that program children had higher self-esteem than control children, $T^2$ (4,57) = 22.23, $p < .001$. There were no differences on the parent form of the Coopersmith SEI and the parent self-esteem rating scale between the program and control parents' responses, $T^2$ (2,55) = 2.92, $p < .25$.

The school achievement data, consisting of grades, attendance, and achievement test scores, indicated that program children functioned better in school than control children, $T^2$ (4,29) =25.52, $p < .01$. In addition,

the program children's report of school effort was higher than that of the control children, $F\ (1,60) = 4.53$, $p < .04$. Ratings by program and control parents for school achievement were not significantly different, $F\ (1,56) = 2.99$, $p < .09$, but it is noteworthy that the control parents rated their children higher than the parents of the program children.

The canonical analyses were performed to assess the effects of length of time in the program on the children's social skills, self-esteem, and school achievement and the parent-child communication-congruence. The independent measures were the age of the child and the total number of hours the child spent in the program. Although age was not specified as a variable for study, it was included as an independent variable in these analyses to control for effects due to maturation. Control children were included in the analyses as representing "zero length" enrichment in the program.

The relationship between the level of the children's social skills, as measured by the CTP and self-ratings, and the independent variables of age and length of time in the program was determined by using the three sources of data -- child, parent, and school. The canonical analysis of child data was significant, $C^2\ (28) = .679$, $p < .01$, but the results indicated social skills were primarily related to the age of the child and affected only minimally by the length of time in the program (canonical weights: Hours = .015, Age = .995.) The canonical analysis of parent ratings of their children's social skills indicated a significant and negative relationship between the dependent and independent variables, $C^2\ (14) = .643$, $p < .01$. In other words, older children and those children who had attended the program longest were rated by parents as having the weakest social skills. It was previously indicated that control parents

rated their children's social skills higher. Consequently an effort was made to determine how the control parents' reports influenced the overall outcome. The additional canonical analysis, performed only on the program parents' reports of their children's social skills, indicated a significant positive relationship between length of time in the program and increased social skills, $C^2$ (14) = .774, $p < .001$.

Data from child reports yielded statistically significant relationships between hours in the program and the dependent measures of self-esteem, $C^2$ (8) = .656, $p < .001$. Although age contributed greatly to the relationship between the independent and dependent variables, length of time in program was still significantly related to increased self-esteem (canonical weights: Hours = .389, Age = .814). Analysis of parent data on self-esteem indicated a significant negative relationship between length of time in program and increases in parent perceptions of children's self-esteem, $C^2$ (4) = .434, $p < .02$.

The analysis of the school achievement data yielded no significant relationship between age and length of time in the ASP and any of the dependent measures, i.e., grades, attendance, and achievement test scores. These findings occurred even though the program children demonstrated greater overall academic achievement than the control children.

Finally, the canonical analysis of the parent-child communication data indicated a statistically significant relationship between both independent variables and the dependent measures of the parent-child communication congruence, $C^2$ (20) = .640, $p < .005$. The number of hours a child was enrolled in the program was positively related to increased communication-congruence. An increase in the age of the child also contributed to better parent-child communication-congruence, but to a lesser extent than hours in the program,

(canonical weights: Hours = .865, Age = .295.

## Discussion

The evaluation study was designed after extensive consultation with staff members and constructed to directly serve the needs of the After-School Program (ASP). The dependent measures were specifically selected to be compatible with program objectives. The evaluation was designed so that non-professional staff could easily comprehend the outcomes and continue an ongoing evaluation process with a minimum of assistance. These procedures increased the probability that staff would be invested in the process and that the results of the evaluation would be accepted and applied.

Multiple measures and multiple sources of data were useful in assessing the program's effects on the children. Since the initial program goals were very broad, many different aspects of the program needed to be considered. The large number of measures was helpful in determining how the program was effecting particular program goals. By using multiple sources of data, results from one area were used to explain disparities in results from other areas, e.g., results of parent-child congruence facilitated the interpretation of the differences between program and control parents.

Results of the analyses indicated that the overall effects of the ASP were favorable. In comparison to controls, program children appeared to have higher self-esteem and better school achievement, but their social skills were not significantly affected by program attendance. The comparisons of parent data and child data indicated that these ratings became more convergent with increased length of time in the program. Over time, ASP children produced more favorable self-ratings and their parents lowered their estimates of their children's functioning, which indicated that the

program was having effects on both children and parents. The parent-child congruence data are consistent with Matteson's (Note 8) suggestion that greater congruence between parent and child reports may result in increases in children's self-esteem. Bledsoe & Wiggins (1973) found that those children who reported their parents understood them best had higher self-esteem scores. It can be concluded that the ASP is associated with improvement in both parent-child relationships and children's self-esteem.

The evaluation process not only yielded the preceding outcomes, but also had significant effects on subsequent programming. The effects included a continued emphasis on the areas of self-esteem, school achievement, and parent-child communications. Feedback resulted in a revised program to enhance the children's social skills. The program staff began by defining the specific social skills expected of the children. Subsequently, the staff members arranged activities such as theatre games and video-taped interactions to facilitate the acquisition of these skills.

More generally, the mechanics of the evaluation process resulted in placing vague program objectives into more specific operational terms, which in turn contributed to more positive staff attitudes toward their program and the children. The staff became more receptive to changes in programming since change became linked to specific measureable outcomes. The staff was more interested in how they were affecting the children and actually requested inservice training to develop their skills as child care workers. As final evidence of increased openness and receptivity, the staff also began to seek out other resources, such as college students to help with their tutoring program and social work trainees to work with problem children.

## Reference Notes

1. Crisis in Child Mental Health. Challenge of the 1970's. Report on the Joint Commission on Mental Health of Children. New York: Harper and Row, 1970.

2. Abelson, W.D., Zigler, E., & Levine, E. Short and long-term changes in intellectual performance during Head Start. Unpublished manuscript, Yale University, 1971.

3. Beller, E.K, Impact of early education on disadvantaged children. In Sally Ryan (ed.) A report on the longitudinal evaluation of preschool programs. Department of Health, Education, and Welfare: Publication Number (OHD) 74-24, 1974.

4. Wholey, J.S., Scanlon, J.W., Duffy, H.G., Fukumoto, J.S., & Vogt, L.M. Federal Evaluation Policy. Washington, D.C.: The Urban Institute, 1970.

5. Karnes, M.B., Zehrbach, R.R., & Teska, J.A. The Karnes' preschool program: Rationale, curricula offerings, and follow up data. In Sally Ryan (ed.) A report on the longitudinal evaluation of preschool programs. Department of Health, Education and Welfare: Publication Number (OHD) 74-24, 1974.

6. Thorpe, L.P., Clark, W.W., & Tiegs, E.W. California Test of Personality. Monterey, California: CTB/McGraw Hill, 1953.

7. Hieronymus, A.N. & Lindquist, E.F. Iowa Test of Basic Skills. Boston, Mass.: Houghton Mifflin, 1971.

8. Matteson, R. Adolescent self-esteem, family communication, and marital satisfaction. Dissertation Abstracts International, 1973, 33, No. 3315.

## References

Bledsoe, J., & Wiggins, R.G. Congruence of adolescents' self-concepts and parents' perception of adolescents' self-concepts. Journal of Psychology, 1973, 83, 131-136.

Campbell, D.T. Reforms as experiments. American Psychologist, 1969, 24, 409-429.

Campbell, D.T. & Fiske, D.N. Convergent and discriminant validation by multitrait-multimethod matrix. Psychological Bulletin, 1959, 56, 81-105.

Coopersmith, S. The antecedents of self-esteem. San Francisco: Freeman, 1967.

Cottrell, L.S. Forward. In E.A.-Suchman, (ed.), Evaluation research. New York: Russell Sage Foundation, 1967.

Cowen, E.L., Trost, M.A., Dorr, D.A., Lorion, R.P., Izzo, L.D. & Isaacson, R.V. New ways in school mental health: Early detection and prevention of school maladaption. New York: Behavioral Publication, 1975.

Durlak, J.A. Description and evaluation of a behaviorally oriented school based preventive mental health program. Journal of Clinical and Consulting Psychology, 1977, 45, 27-33.

Ellsworth, R.B. Consumer feedback in measuring the effectiveness of mental health programs. In M. Guttentag & E. Struening (eds.), Handbook of Evaluation Research. New York: Russell Sage Foundation, 1975.

Fiske, D.W. Problems in measuring personality. In J.M. Wepman & R.W. Heine (eds.), Concepts of Personality. Chicago: Aldine, 1963.

Klaus, R.A. & Gray, S. The early training project and seventh year report. Child Development, 1970, 41, 909-924.

Morrison, Donald F. Multivariate Statistical Methods, Second edition. New York: McGraw Hill, 1976.

Nie, N., Hull, C.H., Jenkins, J.G., Steinbrenner, K., & Bent, D.H. Statistical package for the social sciences, Second edition. New York: McGraw Hill, 1975.

Zigler, E. & Butterfield, E.C. Motivational aspects of changes in IQ test performance of culturally deprived nursery school children. Child Development, 1968, 39, 1-14.